DOCUMENT RESUME

ED 346 083 SP 033 847

AUTHOR Nettles, Saundra Murray
TITLE Coaching in Community Settings: A Review.
INSTITUTION Center on Families, Communities, Schools, and Children's Learning.; Johns Hopkins Univ., Baltimore, Md.
SPONS AGENCY Department of Health and Human Services, Washington, D.C.; Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Apr 92
CONTRACT R117Q0003
NOTE 30p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adults; Art Activities; Athletics; *Child Development; Cognitive Development; *Community Education; Elementary Secondary Education; *Individual Characteristics; *Learning Strategies; Literature Reviews; Public Speaking; Research Needs; School Community Programs; *School Community Relationship; Social Development; *Tutors
IDENTIFIERS *Coaching; Informal Education

ABSTRACT

Coaching is a means of instruction that combines elements of mentoring and tutoring in natural community environments. Coach and student characteristics, processes of coaching, and outcomes of coaching in varied community settings and across different developmental levels are examined. Programs utilizing adults and peers from the community in fields such as sports, arts and crafts, music, and public speaking, expand the roles of peers, parents, and significant nonparental adults in children's cognitive development. This report reviews literature from sports, management, and research on teaching in informal settings to derive a functional definition of coaching. Coaching is a form of instruction that places the responsibility for learning on the learner, fosters the development and maintenance of skill through vigorous use of specific teaching practices, provides continuous feedback on performance in environments structured for practice and display of mastery, and provides social support. The review describes desirable qualities in persons who carry out the functions of coaches, specific strategies that coaches use to promote children's psychosocial development, and the influence of coaching on children's performance in school. Implications for future research and a reference list complete the document. (Author/LL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED346083

CENTER ON FAMILIES, COMMUNITIES, SCHOOLS & CHILDREN'S LEARNING

COACHING IN COMMUNITY SETTINGS

A Review

Saundra Murray Nettles

Report No. 9 / April 1992

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SP033847

BEST COPY AVAILABLE

CENTER ON FAMILIES,
COMMUNITIES, SCHOOLS
& CHILDREN'S LEARNING

Consortium Partners

Boston University, School of Education,
Institute for Responsive Education,
605 Commonwealth Avenue, Boston, MA 02215 (617) 353-3309 fax:(617) 353-8444
The Johns Hopkins University,
3505 North Charles St., Baltimore, MD 21218 (410) 516-0370 fax:(410) 516-6370
The University of Illinois, 210 Education Building,
1310 S. Sixth Street, Champaign, IL 61820 (217) 333-2245 fax:(217) 333-5847
Wheelock College,
45 Pilgrim Road, Boston, MA 02215 (617) 734-5200 fax: (617) 566-7369
Yale University,
310 Prospect Street, New Haven, CT 06520 (203) 432-9931 fax: (203) 432-9933

For more information on the work of the Center, contact:
Owen Heleen, Dissemination Director,
Institute for Responsive Education,
605 Commonwealth Avenue, Boston, MA 02215 (617) 353-3309 fax:(617) 353-8444

National Advisory Panel

Robert Bartman (Chair), Commissioner of Education, Missouri Department of Education, Jefferson City MO

Barbara Bowman, Erikson Institute, Chicago IL

James Comer, Maurice Falk Professor of Child Psychiatry, Yale Child Study Center, New Haven CT

Sanford M. Dornbusch, Director, Family Study Center, Stanford University, Stanford CA

Susan Freedman, Director, Office of Community Education, Massachusetts Department of Education, Quincy MA

Frieda Garcia, Executive Director, United South End Settlements, Boston MA

Evelyn K. Moore, Executive Director, National Black Child Development Institute, Washington DC

Jonathan Sher, Director, North Carolina REAL Enterprises, Chapel Hill NC

Nora Toney, Teacher, David A. Ellis School, Roxbury MA

Rafael Valdivieso, Vice President for Program and Research, Hispanic Policy Development Project, Washington DC

Robert Witherspoon, Director, National Parent Center, National Coalition of Title I Chapter 1 Parents, Washington DC

Coaching in Community Settings

A Review

Saundra Murray Nettles

Johns Hopkins University

Report No. 9

April 1992

Published by the Center on Families, Communities, Schools, and Children's Learning. The Center is supported by the U.S. Department of Education Office of Educational, Research and Improvement (R117Q 00031) in cooperation with the U.S. Department of Health and Human Services. The opinions expressed are the authors' own and do not represent OERI or HHS position on policies.

CENTER ON FAMILIES, COMMUNITIES, SCHOOLS & CHILDREN'S LEARNING

The nation's schools must do more to improve the education of all children, but schools cannot do this alone. More will be accomplished if families and communities work with children, with each other, and with schools to promote successful students.

The mission of this Center is to conduct research, evaluations, policy analyses, and dissemination to produce new and useful knowledge about how families, schools, and communities influence student motivation, learning, and development. A second important goal is to improve the connections between and among these major social institutions.

Two research programs guide the Center's work: the Program on the Early Years of Childhood, covering children aged 0-10 through the elementary grades; and the Program on the Years of Early and Late Adolescence, covering youngsters aged 11-19 through the middle and high school grades.

Research on family, school, and community connections must be conducted to understand more about all children and all families, not just those who are economically and educationally advantaged or already connected to school and community resources. The Center's projects pay particular attention to the diversity of family cultures and backgrounds and to the diversity in family, school, and community practices that support families in helping children succeed across the years of childhood and adolescence. Projects also examine policies at the federal, state, and local levels that produce effective partnerships.

A third program of Institutional Activities includes a wide range of dissemination projects to extend the Center's national leadership. The Center's work will yield new information, practices, and policies to promote partnerships among families, communities, and schools to benefit children's learning.

Abstract

Research on coaching in natural community environments and in programs that use adults and peers from the community can expand our views of the roles of peers, parents, and significant nonparental adults in children's cognitive development. This report reviews literature from sports, management, and research on teaching in informal settings to derive a functional definition of coaching. Coaching is a form of instruction that places the responsibility for learning in the learner and fosters the development and maintenance of skill through vigorous use of specific teaching practices, provision of continuous feedback on performance in environments structured for practice and display of mastery, and provision of social support. The review describes desirable qualities and skills in persons (adults or peers) who carry out the functions of coaches and specific strategies that coaches use to promote children's psychosocial development.

Introduction

Coaching may be as beneficial in the classroom as it is on the athletic field. Adler (1982), for example, asserted that students cannot acquire facility in mathematics and language through instruction alone:

> Since what is learned here is skill in performance, not knowledge of facts and formulas, the mode of teaching cannot be didactic. It cannot consist in the teacher telling, demonstrating, or lecturing. Instead, it must be akin to the coaching that is done to impart athletic skills. . . . The lack of coaching and drilling by itself accounts for the present deficiencies of many high school graduates in reading, writing, computing, and in following directions. (Adler, 1982, p. 27)

Many authors recommend the use of coaching as a way to facilitate teachers' transfer of skills from training to classroom use (see for examples, Hunter 1991; Joyce & Showers, 1982; Joyce & Weil, 1986). In community settings, attention has focused on ways to increase the pool of significant, nonparental adults in the lives of children and youth (Galbo,1989). Mentoring has been of particular interest as a means to provide social support for at-risk youth (Flaxman, Ascher, & Harrington, 1988; Freedman, 1991; McPartland & Nettles, 1991), and community-based tutoring is a way to enhance, outside of school, students' academic success in schools (Nettles, 1991).

Less attention has focused on coaching, which is a means of instruction that combines elements of mentoring and tutoring. Coaches, like mentors, may be individuals with expertise, interests or special talents who assist children in their efforts to achieve a goal. Like mentors, coaches have several functions, such as instructing, providing access to opportunities and powerful persons, removing external impediments to student progress, and providing social support. Unlike mentoring, however, coaching occurs in the context of a specific area of skill, achievement or ability wherein the coach observes and gives feedback on the student's performance in real time. This element of instruction in a specific area is the major way in which coaching resembles tutoring. Tutoring is typically associated with academic subjects, such as reading and mathematics, initially introduced to the learner by someone other than the tutor.

In community settings, the most familiar areas of skill and achievement in which children and youth are coached are sports, arts and crafts, music, and public speaking. These areas, which are highly visible in the media, offer children and youths opportunities to participate at increasing levels of accomplishment and skill in organized public performances and competitions. Such opportunities range from Little League baseball to ballet and piano competitions to oratory contests sponsored by lodges and other community organizations.

Less visible is the coaching that occurs in everyday activities outside of organized competition. Churches conduct activities that require children to memorize passages from religious and other literary texts and recite the passages before an audience of adults and peers. Church members (such as Sunday or Saturday school teachers) serve as coaches, giving children pointers on public speaking and some nuances of stage production. Librarians may play similar roles in teaching children to tell stories, to find information, and to understand plot and character, and parents and other family members and friends often serve as children's first coaches in athletics and other areas (Bloom, 1985).

Adults from the community often volunteer in schools to coach students in a performance area. In the Science/Math Enrichment Project in Baltimore, for example, retired persons coached students preparing for participation in science fairs (National Executive Service Corps, 1991). In another Baltimore project, Building on the Basics, architects coached students in building a scale replica of a city neighborhood (Englund, 1990).

Anecdotal evidence of the importance of coaches in children's lives appears frequently in the sports pages of local newspapers and in biographical sources. Also, research indicates that adolescents frequently cite coaches as people who play significant roles in their lives (Danziger & Farber, 1990; Galbo, 1989). Studies of coaching in community settings, however, are rare.

In this essay, to develop a framework for a systematic examination of coaching in varied community settings and across different developmental levels, I examine theoretical, practical and research knowledge on different types of coaching. Information on teaching and learning in informal settings is also considered. I define the functions of coaching first, then discuss the qualities and skills of coaches. In the third section I consider the psychosocial outcomes of coaching, and in the conclusion, the implications for research.

Functions of Coaching

Coaching is a term used in different fields or areas of performance, including sports, forensics, music and the arts, management, and teaching. Accordingly, definitions of coaching are diverse and often reflect in tone and content the distinct characteristics of a given field.

For example, the following definition introduces a discussion of coaching in a book on the practice of excellent management in business and other areas of leadership:

> Coaching is face-to-face leadership that pulls together people with diverse backgrounds, talents, experiences and interests, encourages them to step up to responsibility and continued achievement, and treats them as full-scale partners and contributors. (Peters & Austin, 1985, p. 384)

In sport psychology, where the process of coaching is studied extensively, coaching is often defined in terms of specific behaviors measured with structured instruments. For example, the Coaching Behavior Assessment System (Smith, Smoll, & Hunt, 1977) classified coaching into 12 categories such as mistake-contingent encouragement, punishment, and technical instruction. Another system, the Lombardo Coaching Behavior Analysis System (Lombardo, Faraone, & Pothier, 1983) defined coaching according to observations of a coach's verbal and nonverbal evaluations and on-task and off-task behavior.

Common functions of coaching can be identified across fields. The remainder of this section expands on the following definition of coaching that will be applicable to coaching in planned interventions for children and youth and in everyday community settings:

> Coaching is instruction that places the responsibility for learning in the learner and fosters the development of skill through vigorous use of teaching practices, provision of continuous feedback on performance in settings designed for practice or display of mastery, and provision of companionship and other forms of social support.

Four functions are considered: teaching, assessing performance, structuring the learning environment, and providing social support.

Teaching

Coaching as teaching embraces several well-defined ways to help learners develop skills. This review uses the typology of teaching strategies identified by Tharp and Gallimore (1988), who include coaching and learning outside of schools in their definition of teaching as the assistance of learning. These investigators identified the following six means whereby teachers can help children learn:

modeling, behavioral or verbal demonstrations that are available or offered for imitation;

contingency management, the use of rewards or punishments following a behavior;

feeding back, the provision of information on performance;

instruction, telling someone what to do or how to do it (giving directions) or calling for action;

questioning, requesting a verbal reply;

cognitive structuring, providing a framework for behavior and thought.

In applying these approaches, the teacher must observe the learner's actual performance; hence, the teacher must provide opportunities for practice and display of mastery and be present to interact with the learner during the performance.

The use of approaches to assist performance was illustrated in Tharp and Gallimore's (1976) study of Coach John Wooden's methods of teaching basketball. Wooden, who retired from UCLA in 1975, coached the University's team to a record 10 national championships in 12 seasons. During Wooden's last year, Tharp and Gallimore observed him in 15 practice sessions.

The investigators used an observational system composed of 10 categories of instructional practice. Eight of them were standard ones the investigators used in teacher training and classroom research: instructions, positive modeling, negative modeling, praises, scolds, nonverbal reward, nonverbal punishment, and miscellaneous. Of these behaviors, instructions constituted half of Wooden's total communications, followed by praises (6.9%) and scolds (6.6%).

Although Wooden used positive and negative modeling only about 4% of the time, the investigators judged this aspect of his teaching as the area of his "greatest artistry." His modeling technique consisted of a positive/negative/positive combination, wherein he demonstrated the correct way to perform, then modeled the incorrect technique displayed by a player, and then repeated the correct technique.

Tharp and Gallimore added two new categories to their observational system. Their labels convey the immediacy and intense involvement with the performer that is evoked by images of coaches in action. One category was "hustles," defined as "verbal statements to activate or intensify previously instructed behavior" (Tharpe & Gallimore, 1976, p. 76). Hustles constituted the second most frequent of Wooden's behaviors, accounting for roughly 13% of the total communications.

The second new category was "scold/reinstruction." Like the hustle, the scold/reinstruction is a verbal statement that refers to previous instruction, but it is combined with a scold. An example is "how many times do I have to tell you to follow through with your head when shooting?" (Tharpe & Gallimore, 1976, p. 76). Eight percent of Wooden's instruction fell into this category.

Wooden's vigor and intensity in the act of coaching, as well as his use of specific teaching approaches, is mirrored in the behavior of teachers as coaches in the arts. The following is from a journalistic account (Sauder, 1991) of a classroom session of Peabody Outreach -- a program of the Johns Hopkins Peabody Conservatory that provides musical training to students in public schools. The scene illustrates the use of instructions and modeling in self-control of movement, one of the central approaches of the program. The accompanying photographs show the teacher, who is a member of the outreach staff, in the circle, his arms stretched out and knees bent.

> A dozen children walk carefully and quietly, counter-clockwise, around a circle of carpet squares arrayed on the floor.
> "Freeze!" orders their teacher, a slender 27-year-old whose button-down shirt and tie might suggest an accountant. Yet he moves as lightly as a dancer. The 7-year olds are as still as the living mannequins one sometimes encounters in a department store.
> "Willie, your fingers are moving," he says.
> . . .
> "Hel-lo, everyone," he sings in a rich tenor.
> "Hel-lo, Mis-ter Her-shey," they echo, with more discipline and melody than one might expect from 17 second-graders. (Sauder, 1991, p. 38).

The few available studies on coaching in settings outside of schools suggest that many of the teaching strategies found in the Wooden study -- particularly modeling, instruction, and

contingency management -- may characterize the coaching that occurs in community settings. Two studies are discussed below. The first used a theoretical framework that is a basis for a model of teaching in informal settings, and the second explored the ways in which high levels of individual achievement were fostered in athletic, artistic and intellectual endeavors.

Coaching in the context of everyday living. Tharp and Gallimore's (1988, 1989) definition of teaching as assisted performance links the research on means of assisting performance (i.e., modeling, feeding back) to Vygotskian notions of the social construction of knowledge, particularly the concept of the zone of proximal development (ZPD). According to Vygotsky, a child's developmental level is what the child can do without assistance, whereas what the child can do with assistance from adults or capable peers is called the zone of proximal development (ZPD). In Tharpe and Gallimore's definition, "teaching consists in assisting performance through the ZPD. Teaching can be said to occur when assistance is offered at points in the ZPD at which performance requires assistance" (Tharp & Gallimore, 1988, p. 31).

Studies of learning in everyday activities have used the ZPD concept in explanations of scaffolding, a metaphor that provides a theoretical basis for informal learning (Greenfield, 1984). Scaffolding is a process whereby the teacher, building on the learner's existing skills, gradually adjusts instruction until the learner successfully accomplishes the task. As a metaphor, "scaffold" connotes the characteristics of a tool used by a worker attempting to accomplish a task that could not be completed without the aid of a support structure. According to Greenfield: "... adult guidance, when it functions as a scaffold in the zone of proximal development, not only leads the child to solve problems collaboratively that could not be solved alone, but also moves the embryonic skill towards its full-blown manifestation" (Greenfield, 1984, p. 119).

The ways that informal teachers used scaffolding were explored in a study of 14 girls learning to weave in the Zinacanteco culture in southern Mexico (Childs & Greenfield, 1980, cited in Greenfield, 1984; Greenfield & Lave, 1982). The girls, whose previous weaving experience ranged from none to expert, were videotaped in natural settings in which at least one teacher (typically, a close relative) was present. The tapes were coded to capture, among other things, categories of verbal and nonverbal instruction and attention levels of learners.

The scaffold constructed by the teachers consisted of modeling, wherein the teacher took over the weaving from the learner and demonstrated the technique, and verbal instruction. Verbal instruction in the form of commands was most prevalent (91% of instructions) at the initial stages of learning. Statements constituted only 4% of the verbalizations. Commands decreased to a frequency of 53% by the time the learner had woven two to four articles, while the use of statements increased to 40%. In short, the frequency of these aids to

learning varied according to the learner's previous experience, with teachers taking over (modeling) the weaving more frequently with less experienced weavers.

Coaching and the development of talent. Information on coaching in settings outside the school is typically autobiographical, journalistic, or anecdotal, hence The Development of Talent Research Project (Bloom, 1985) is valuable as one of the few formal studies to examine the role of coaches in informal settings. In this study, Bloom and associates obtained retrospective accounts of how talent was developed in 20 to 25 persons in six fields: swimming, tennis, sculpting, piano playing, research mathematics, and research neurology. The subjects, all under the age of 35, were selected because they were highly accomplished in their fields. Face-to-face interviews were conducted with the subjects, and phone interviews were conducted with their parents. Major teachers and coaches were also contacted.

The resulting analyses provided a perspective on the quality of the subjects' experiences as they progressed from initial interest in the talent area to advanced levels of achievement. Sosniak (1985b) described the progression as three phases of learning. The first phase is one in which interest is engaged; the second entails the development of skill and technique; and in the third phase, the learner introduces his or her individuality and interpretation into performance.

The following discussion draws on the analyses of talent development in the arts and sports, two areas in which subjects were instructed or coached outside of schools. The persons who served as coaches or instructors varied over the years, from parents, siblings, and other relatives, to family friends and master teachers.

Although the descriptions of talent development in the various areas do not provide counts of specific instructional practices, four practices of coaches and teachers -- providing rewards, giving instructions, asking questions, and modeling -- dominate the accounts. The use of **rewards** was liberal in the first phase of learning, when the subject was being introduced. As one pianist commented: "All I had to do was play the right notes in the right rhythm and I got a Hershey bar" (Sosniak, 1985a, p. 31).

Verbal interactions in the form of **questions and instructions** were used throughout all phases, although the level of the coach's or teacher's input was more intense in the latter phases than in earlier ones. This difference in intensity may be confounded by coach or teacher quality; subjects typically switched to better coaches or teachers in the second phase, after parents and others recognized the emergent talent. Monsaas (1985) noted that in tennis, ". . . the first coaches were frequently lacking the important technical skills of a good coach" (p. 234). The more accomplished coaches used a variety of means to help players develop

competitive strategy and technical proficiency. A sense of how competitive strategy was coached is conveyed in the following quote from one of the tennis players:

> I would play with [my coach], and we would play some sets out. And we would play a point and we would analyze the point. . . . He would say, "Why did you do this?" . . . "If you see a guy in a certain position on the court, then you should watch out for this shot." (Monsaas, 1985, p. 242)

Modeling was also apparent in all phases. The expert coaches and teachers demonstrated how to perform correctly an act or component of a skill (for example, holding the fingers in a certain way before striking the keys of the piano), but parents and other family members sometimes served as models, particularly in the early years (Sloane, 1985).

Other modeling consisted of nontechnical behaviors, such as persistence at tasks and at the later phases of the process of being an accomplished athlete or performer. One sculptor described this aspect of modeling as follows:

> The teachers there were such good teachers because they made their art there. And you saw the whole process. From beginning to make it, to crating it and shipping it, to the opening, and then reading the reviews. And you saw the whole thing. (Sloan & Sosniak, 1985, p. 121)

The study described many other actions of coaches beyond those that structure the interaction between coach or teacher and learner. Some actions that coaches perform assess the student's competence at various stages of the learning process. I discuss these actions next.

Assessing Performance

To manage contingencies, provide information and feedback, and model correct action, the coach uses a goal or standard which the performer desires or is required to meet. The assessment function of coaching entails both the establishment or identification of targets for performance and the actions needed to determine accurately the performer's existing skills and knowledge.

Behavioral coaching, athletic coaching that uses behavior modification techniques, emphasizes detailed and frequent assessment of performance against an explicit standard. According to Martin and Hrycaiko (1983), behavioral coaching begins with the preparation of a list of desired behaviors, followed by specification of the approaches that will be used to monitor improvement.

Several studies confirm that experienced adult coaches can apply behavioral coaching techniques and thereby improve learner performance. For example, when coaches charted and posted graphs of attendance at practice sessions, instances of swimmers' absenteeism, leaving early, and tardiness decreased (McKenzie & Rushall, 1974). Peer coaches, however, are also able to apply assessment techniques effectively, as illustrated in a study of peer coaching in soccer (Rush & Ayllon, 1984). Nine boys, aged 8 to 10, were coached in three soccer skills ("heading," "throw-ins," and "goal kicks") by a 12-year old assistant peer coach. During a two-hour training session, the peer coach was instructed to perform three steps: (1) Judge performance executed by players; (2) Model the correct skill; and (3) Prompt players to imitate the modeled skill.

In judging the players, the peer coach was required to instruct the players on the contingencies associated with correct and incorrect performance. For example, when a player performed a skill incorrectly, the peer coach was to say: "When you make mistakes, I'll let you know by yelling freeze. Be sure to to stay still when I say freeze; that way I will find out and tell what is wrong and you will be able to remember what to do the next time" (Rush & Allyon, 1984, p.328).

During the training period, the peer coach also practiced distinguishing between correct and incorrect performances. The correct performance was defined by specific behaviors. For example, the experimenters defined "heading" as follows:

> (a) The player hits the ball with his forehead, (b) keeps his eyes open, (c) gets under the ball, (d) moves into the ball (i.e., hits it rather than letting it hit him), and (e) heads the ball a distance of 3.38m into a marked area on the field 1.84m by 2.51m. (Rush & Allyon, 1984, p.327)

Under "standard" coaching (praise for good performance and extra laps or scolding for poor performance), one player who was learning to improve the skill of "heading" hit the target correctly 2 times out of 6 opportunities before treatment; 4 times of 6 under behavioral coaching, and 1 in 5 after behavioral coaching was withdrawn. Overall, the performance of the nine players improved with the use of behavioral coaching.

The literature on job coaching in supported work programs (i.e., programs in which the worker is provided extensive on-site training and advocacy) provides another perspective on the performance assessment function. In preparing disabled persons for paid employment in supported work settings, job coaches must be skilled at job analysis, the detailed description of each increment in a work process, the identification of requisite abilities and skills of the worker, and worker evaluation as well.

For example, Fadely (1987) presented a job analysis form that requires the job coach to appraise potential job placements according to personal requirements (worker appearance and interactions, for example), time/travel factors, work tolerance, performance skills, functional academic skill requirements, employer concerns, environmental factors, and the specific duties, work speed, and task sequences for given increments of work. The completed job analysis serves as the basis for the coach's teaching function (on-the-job training of the disabled worker). Comparing the performance to the job analysis, the coach observes what the worker can do on the job without assistance (such as reinforcement or verbal prompting). Such observations of performance, called "probe data," are collected when the worker first begins employment, and thereafter once a week at the beginning of a training session. Task mastery is judged to occur when the worker is able to complete each step of the task with 100% accuracy during three consecutive probes.

Another task of the job coach in supported work programs is matching clients to appropriate jobs. The task consists of matching client characteristics (identified through separate information-gathering procedures such as interviews with the client and persons who work with the client) and matching the characteristics with job requirements identified in the job analysis. This task is a specific example of the coaching function discussed next, structuring the learning environment.

Structuring the Learning Environment

Some coach actions occur outside the interaction between coach and learner. These actions include manipulating, selecting, or preparing the environment to create an optimal setting for learning.

For example, coaches may initiate and manage the learner's transition to a new coach who will provide a more expert level of instruction. In the study of talent development among pianists, almost half of students' first teachers advised parents that the child needed a better teacher (Sosniak, 1985a). Coaches also determine the materials to be used in learning or the social organization of the environment. Examples of the latter action include changing the learner from group to individual instruction (and vice versa), selecting competitive venues, and increasing or decreasing the number of training sessions.

A paradigm for manipulating learning environments was presented in a study of skiing as a model of instruction (Burton, Brown & Fischer, 1984). The paradigm is called "increasingly complex microworlds" (ICM) and specifies that learners are to be exposed to a series of microworlds wherein each environment features a more complex task than the preceding environment. The paradigm also requires determining what is learned in a given environment (or microworld) and how to choose subsequent microworlds.

In creating a microworld to allow a learner to practice particular skills and subskills, the coach manipulates three elements: the equipment needed to perform the skill, the physical setting in which learning takes place, and the type of task given the equipment and the setting. Ultimately the designs should free the learner to focus on the fundamentals of the skill, rather than on factors that are peripheral.

An example of the use of the paradigm is the design of an environment wherein a skier learns to glide.

> For the beginner skier, gliding and stopping are two essential subskills that have to be learned. But stopping cannot be practiced without gliding, and gliding is dangerous unless one knows how to stop. . . The problem can be solved by choosing the right setting. By the choice of a downhill slope, the subskill of stopping is avoided. (Burton, Brown, & Fischer, 1984, p. 144)

In the study of talent development, parents played major roles in structuring the home environment for productive practice (Sloan, 1985). Some parents took lessons so that they could actively assist the child or at least understand the requirements that the child was expected to meet, and they bought talent-related materials and supplies for the home. Parents scheduled and monitored practice in the home or transported students to practice or lessons outside the home.

Parents, however, did not merely set up practice times, drop their children at the courts, or provide other forms of instrumental support. During practice and performances, these parents often were physically present to cheer, console, or provide other forms of companionship. In this way, parents were carrying out one of the most valued functions of coaching - - providing social support.

Providing Social Support

The function of coaching as social support stems from the notion that a personal relationship between coach and learner facilitates the learner's mastery of the skill and sense of competence as a performer. The coach's stake in the relationship begins with the learner's acceptance of a fundemental tenet: the responsibility for learning is the learner's, not the teacher's. This voluntary aspect of learning is a characteristic of coach-athlete relationships as well as teacher-learning relationships in informal settings (Greenfield & Lave, 1982; Griffin, 1988; Templeton, 1991).

Social support is described across domains in remarkably similar terms: counseling, listening, protecting, advising, sharing, creating trust, and empathizing. The supportive function of coaching promotes not only the learner's skill in the performance area, but the

learner's personal and psychological growth as well (Butt, 1987). Joyce and Weil (1986), for example, define as follows the function of companionship in coaching among teachers:

> The first function of coaching is to provide interchange with another human being over a difficult process. The coaching relationship results in the possibility of mutual reflection, the checking of perceptions, the sharing of frustrations and successes, and the informal thinking through of mutual problems. (Joyce & Weil, 1986, p. 481)

The types of processes that define the social support function of coaching overlap considerably with those usually associated with mentoring. However, Sample (1984), reviewed the management literature and found that it clearly distinguishes the roles of coach and mentor. He suggested that the roles imply different interventions, with coaching being more skill oriented and mentoring more relationship oriented.

Summary

Using literature from sport, management, and research on teaching in informal settings, the foregoing discussion introduced a functional definition of coaching. Coaching is a form of instruction that places the responsibility for learning in the learner and fosters the development and maintenance of skill through vigorous use of specific teaching practices, provision of continuous feedback on performance in environments structured for practice and display of mastery, and provision of social support.

The definition is useful in understanding coaching in community settings in that it permits us to identify coaching by what a person does in relation to a learner, rather than by what the person carrying out the functions is called. This is important in community settings where labels may not convey information about role behavior in the same way as titles and other labels do in formal settings, and where persons may play different roles at different times with a given learner. For example, the review indicates that parents carry out coaching functions in addition to other parental roles.

The remainder of the review considers in greater detail desirable qualities and skills in persons, be they adults or peers, who carry out the functions of coaches and specific strategies that coaches use to promote children's psychosocial development.

Qualities, Skills, and Attitudes of Coaches in Community Settings

The literature on coaching is replete with suggestions about ideal or desirable qualities and skills of coaches, but systematic research is rare. The following draws on practical sources and the few available studies.

To carry out the teaching and assessment functions, skill in the technical aspects of the performance area is required. The study of talent development, however, suggests that when the child is initially introduced to the talent area, a high degree of coach or teacher warmth may be more critical in engaging the child's interest than coaching expertise (Sosniak, 1985b). Research on teaching in informal settings suggests that the coach may need cognitive skills that permit effective use of the scaffolding technique (Greenfield, 1984).

Skill in the application of the means of assisting performance (contingency management, modeling, and others mentioned above) is required among practitioners of behavioral coaching, and those who use the method should be trained according to empirically based guidelines. In standard coaching and in coaching in areas other than sport, however, the use of these means seems to be informal, a sign of the coach's art and experience rather than a planned application of behavioral principles.

Practioners of management coaching have elaborated the skills needed for the social support function of coaching. For example, the training manual produced by the Distributive Industry Training Board (1980) identified the following sets of skills as important for management coaches to master.

1. The skills of 'Drawing Out'
2. The skills of 'Attending'
3. The skills of 'Giving and Receiving Feedback'

In their review of mentoring programs and research, Flaxman and associates (1988) cite findings that indicate the importance of these skills (and related ones, including patience and caring) in establishing and developing the mentor-protege relationship. Moreover, findings suggest that learners need certain qualities, such as enthusiasm, ability to listen, and eagerness to learn, to benefit from relationships, These authors, however, commented that ". . .these qualities are not any different from those that make for a smooth teacher-student, or peer-tutoring, relationship, for example, or from any successful relationship in which learning takes place. They are not finely-tuned to distinguish those who can profit from mentoring from those who would do better with another intervention." (Flaxman, Ascher, & Harrington, 1988, p. 31)

Researchers have only recently begun to examine issues related to coach-learner relationships, but the evidence suggests that learner (athlete) perceptions of the coach's behavior and personal characteristics affect performance-related factors. Horne & Carron (1985), for example, examined compatibility in coach-athlete dyads in four univeristy sports (basketball, volleyball, track and field, and swimming).

Using a scale that measured specific aspects of coach leadership (the Leadership Scale for Sports, or LSS), these investigators found that the athlete's perception of her performance was related to the perception that the coach gave the desired amount of positive feedback about performance. Further, coach-athlete dyads that rated themselves as compatible were those in which the athlete perceived that the coach was providing the desired amount of performance-related reinforcement and in which the athlete perceived that the coach's autocratic behavior did not exceed a desired limit. Compatibility and performance were unrelated to perceptions of the coach's training and instruction, democratic behavior, or social support, where social support was defined as positive social interaction regardless of the athlete's performance. Overall, the findings suggest that both teaching skill (e.g., the use of reinforcement) and psychosocial characteristics (level of autocratic behavior) may be important considerations in selecting or training coaches and in matching coaches to learners.

Butt (1987) asserts that a constructive relationship between coach and athlete is critical to development of skill in sport. Such a relationship, based on the goal of promoting the learner's psychosocial development as well as his or her skill in sport, requires coaches to have both technical and interpersonal skills:

> The first principles of good coaching command that the coach have an empathic understanding of the athlete's character, an insight into the various paths of development that are possible, a genuine regard for the person of the athlete, and the ability to communicate all this. It is also necessary that the coach be a technical expert at the game, but this alone will not make a good coach. An ideal coach is usually idealistic, genuine, and a natural psychologist. (Butt, 1987, p. 170- 171)

In short, good coaches are intelligent and likeable as well as skilled in the particular subject area.

Psychosocial Outcomes of Coaching

The learning of skills in a specific area of performance is the highest priority in coaching, but coaching also emphasizes the development of general skills (often called life skills) that facilitate performance across areas of achievement or ability. One debating coach, for example, urged colleagues to refrain from conducting research and developing arguments for students' performances at tournaments:

> When we develop arguments and research evidence for our students rather than teach them mainly the skills of debate, students lose the benefits of learning the life skills which debate should teach. Goal-setting and time management, self-discipline and self-actualization are never achieved by spoon-feeding. (East, 1985, p. 3)

In the home, many parents model skills related to later success in the work world. Swick (1987) cited such skills as time management, cooperation and compromise, and balancing work and family commitments. In the study of talent development, parents modeled productive use of time, persistence at valued tasks, and setting high personal standards (Sloan, 1985). Nearly all the parents were involved in leisure activities that required practice and learning, and the parents reported that they disapproved of play before work, sloppy work, and idleness.

Sport psychology provides perspectives on the types of nontechnical skills that make a difference in the performance levels of athletes. Griffin (1988) asserts that the lessons about fostering achievement in sport may be applicable in teaching underachievers in school. He identified the following skills from his reading of sports psychologists: setting goals, concentration and relaxation, developing and carrying out plans, self-control/self-management, ability to resolve conflicts, constructively using feedback after failure (the ability to learn from failure), and ability to gauge one's own skills and requirements. In addition to these skills, the attitudes of self-confidence and high self-efficacy are related to successful athletic performance, as found in a number of research studies (see Butt, 1987 for a review).

In an application of principles of sports psychology, two high schools in Northern California are implementing Promoting Achievement in School Through Sport (PASS), a program developed by the American Sports Institute. PASS is structured as an elective, year-long physical education class. It is open to all students, although many athletes with academic problems enroll.

The curriculum features activities wherein students develop a personal perspective on excellence in academic and athletic performance and design a project to achieve goals in

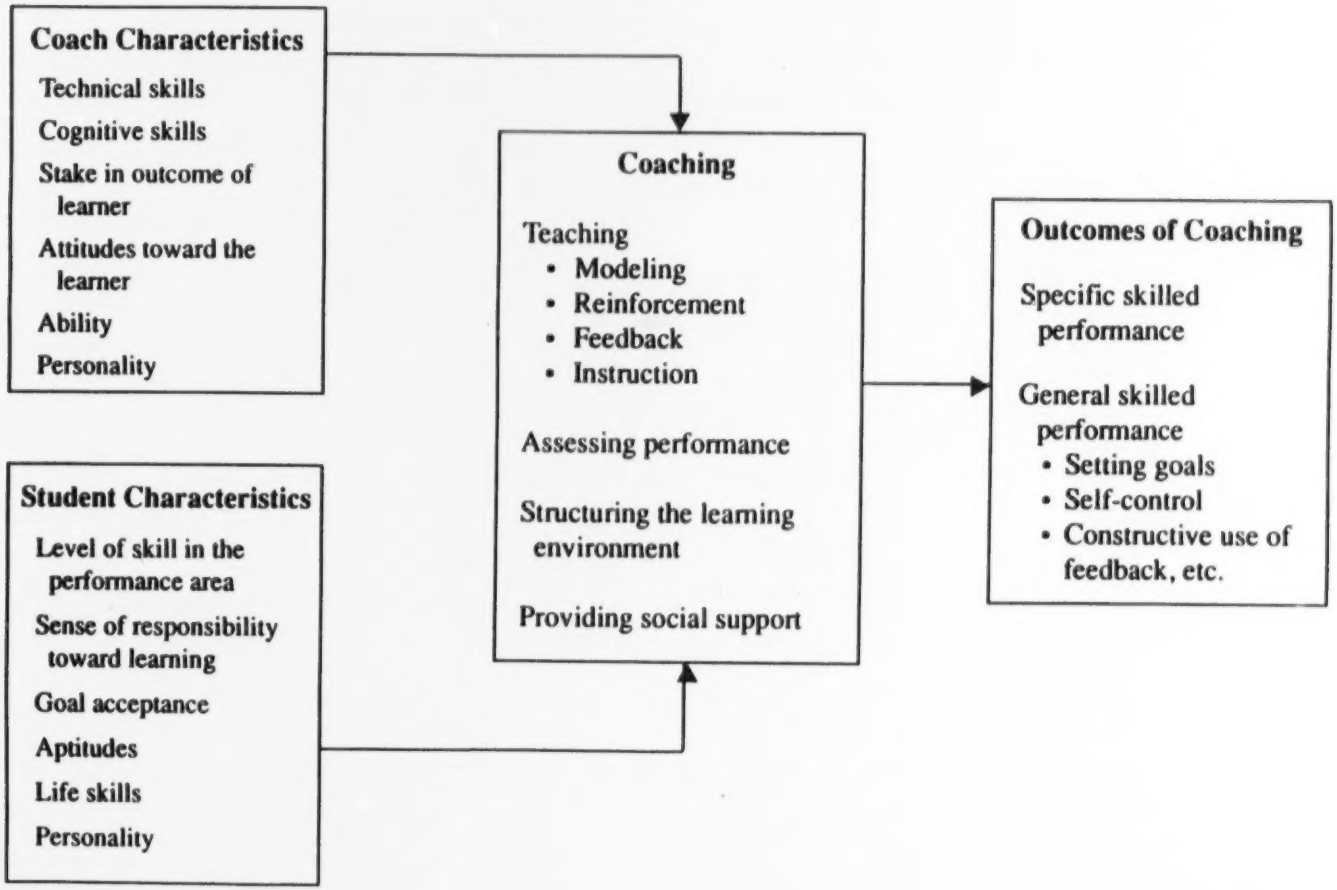
these two areas. The approach to realizing the goals emphasizes proficiency in the Fundamentals of Athletic Mastery (FAMs), a set of skills that lead to athletic success. These skills include concentration, balance, relaxation, power, rhythm, flexibility, attitude, and instinct. Students in PASS are coached in these skills through structured activities in physical movement, writing, reading, and speaking. Evidence from an evaluation of the program's first year (the 1990-1991 school year) in one high school indicated that the grades of PASS students improved relative to those of controls (Griffin, 1991; Promoting Achievement in School Through Sports, n.d.).

How does coaching contribute to the development of life skills? Research on sport psychology provides data on the specific behaviors that are related to learning of nontechnical skills. For example, Gould and associates (Gould, Hodge, Peterson, & Giannini, 1989) found that elite coaches rated 3 of 13 strategies as ones they used to enhance self-efficacy among athletes: instruction-drilling, modeling of confidence, and encouragement of positive self-talk. In Horn's (1985) study of 72 softball players in the middle grades, punishment that coaches provided after players' mistakes facilitated the development of perceived physical competence, expectancy of success in sport, and perceived academic competence.

Summary and Implications for Research

Figure 1 summarizes the foregoing discussion within a conceptual framework that identifies three sets of factors to be considered in explorations of coaching in community settings. Hypothetical causal relationships suggested by the available research are also shown. **Coach characteristics** include technical expertise in the performance area, attitudes toward the learner, cognitive skills (such as those required for assessment and structuring the environment), and personal qualities (e.g., warmth) are hypothesized as influencing the performance or processes of **coaching**. These processes are defined as four functions: teaching (defined as assisting performance through four primary modes -- reinforcement, instruction, modeling, and feedback); assessing performance; structuring or preparing the environment for learning, and providing social support or companionship to the learner. The **outcomes of coaching** fall into two major categories: 1) skill in the performance area and 2) psychosocial development, primarily in the area often referred to as life skills (e.g., setting goals and resolving conflicts). Although **student characteristics** were not the focus of this essay, they are shown as inputs that influence the act of coaching.

Figure 1. A Framework for Examining Coaching in Community Settings



The categories and constituent factors represented in the framework are best viewed as a first approximation rather than an exhaustive map of the domain of coaching in community settings. The framework provides a broad outline to assist researchers in addressing the many gaps in our knowledge of this phenomenon and in identifying new lines of inquiry within research on informal learning and on interventions.

For example, a major gap in the literature is systematic studies of the coaching process as it occurs, especially in fields other than sport. The most comprehensive study of the role of coaching in the arts and other areas, the Development of Talent Research Project, used retrospective accounts from coaches and other informants. Overall, we know very little about community settings in which coaching occurs, differences in coaching behavior across skill areas, variation in coaching behaviors according to the developmental levels of learners, and differences in the ways that adults and peers function as coaches.

It is likely that studies in natural settings will reveal that coaching is often short term, casual, or episodic. Research on programs that place parents and community members in instructional roles may thus be useful in studying long term outcomes of coaching as well as strategies for training persons to serve exclusively as coaches or to carry out coaching functions within other roles, such as mentor or youth worker. Studies in existing interventions or action research designed especially to examine coaching would be extremely useful in answering such questions as the following:

> How extensive is coaching in programs that include other activities for participants? What is the nature of the coaching? How are coaching relationships introduced, developed and maintained within programs?
>
> How does level of preparation or training affect coaches' instructional practices (such as type and frequency of reinforcements used; methods of providing information on how to do a particular task)?
>
> What expectations about learner attitudes and performance do coaches have at different points in the coach-learner relationship? How do expectations affect the nature and extent of the relationship in terms of intensity and compatibility?
>
> What are the effects on learner skills (academic, social, and job-related) and attitudes (e.g., perceptions of ability) of participation in programs with a coaching component?

Research on coaching in natural community environments and in programs that use adults and peers from the community can expand our views of the roles of peers, parents, and

significant nonparental adults in children's cognitive development. Such research may also provide avenues for understanding how social interaction between coaches and learners facilitates both cognitive and social learning and the influence of coaching on children's performance in schools and other settings.

References

Adler, M. J. (1982). *The paideia proposal: An educational manifesto.* New York: Macmillan Publishing.

Bloom, B. (Ed.). (1985). *Developing talent in young people.* New York: Ballantine Books.

Burton, R. R., Brown, J. S., & Fischer, G. (1984). Skiing as a model of instruction. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp.139-150). Cambridge, MA: Harvard University Press.

Butt, D. S. (1897). *The psychology of sport: The behavior, motivation, personality and performance of athletes.* (2nd ed.). New York: Van Nostrand Reinhold.

Danish, S. J., Howard, C. W., & Farrell, A. D. (n.d.). *Going for the goal projects.* Richmond, VA: Virginia Commonwealth University, Department of Psychology.

Danziger, S. K., & Farber, N. B. (1990). Keeping inner-city youths in school: Critical experiences of young black women. *Social Work and Research Abstracts*, 26, 32-39.

Distributive Industry Training Board. (1980). *Coach to succeed. A DITB training guide.* (Report No. ISBN-0-903416-24-7). Manchester, England: author. (ERIC Document Reproduction Service No. ED 278 770)

East, R. (1985, April). *Remote control.* Paper presented at the National Forensic League Conference on the State of Debate, Kansas City, MO. (ERIC Document Reproduction Service No. ED 276 083)

Englund, W. (1990, May 21). At Liberty Elementary, third-graders learn to build on the lessons of the day. *The Baltimore Sun*, p. 7c.

Fadely, D. C. (1987). *Job coaching in supported work programs.* (Report No. ISBN-0-916-671-75-5). Menomonie, WI: University of Wisconsin-Stout, Stout Vocational Rehabilitation Inst. (ERIC Document Reproduction Service No. ED 294 050)

Flaxman, E., Ascher, C., & Harrington, C. (1988). *Youth mentoring programs and practices.* (Urban Diversity Series No. 97). ERIC Clearinghouse on Urban Education Institute for Urban and Minority Education.

Freedman, M. (1991, Fall). *The kindness of strangers.* Philadelphia, PA: Public/Private Ventures.

Galbo, J. J. (1989, April). *Nonparental significant adults in adolescents' lives: Literature, overview, theory, and issues.* Paper presented at the national biennial meeting of the Society for Research in Child Development, Kansas City.

Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport & Exercise Psychology*, 11, 128-140.

Greenfield, P. M. (1984). A theory of the teacher in the learning activities of everyday life. In B. Rogoff 7 J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp. 117-138). Cambridge, MA: Harvard University Press.

Greenfield, P. M., & Lave, J. (1982). Cognitive aspects of informal education. In D. A. Wagner & H. W. Stevenson (Eds.), *Cultural perspectives on child development* (pp. 181-207). San Francisco: W. H. Freeman and Company.

Griffin, R. (1991). Helping athletes excel in the classroom--and on the field. *The Clearing House*, 65, 23-25.

Griffin, R. S. (1988). *Underachievers in secondary school: Education off the mark.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Horn, T. S. (1985). Coaches' feedback and changes in children's perceptions of their physical competence. *Journal of Educational Psychology*, 77(2), 174-186.

Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7, 137-149.

Hunter, M. (1991, January). Co-ob coaching: A winning combination. *Principal*, pp. 38-40.

Joyce, B. R., & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1), 4-16.

Joyce, B., & Weil, M. (1986). *Models of teaching.* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Lombardo, B. J., Faraone, N. F., & Pothier, D. (1983, February). *The coach in action: A descriptive analysis.* Paper presented at the convention of the Eastern District Association of the American Alliance for Health, Physical Education, Recreation and Dance, Providence, RI. (ERIC Document Reproduction Service No. ED 229-354)

Martin, G., & Hrycaiko, D. (1983). Effective behavioral coaching: What's it all about? *Journal of Sport Psychology*, 5, 8-20.

BEST COPY AVAILABLE

McKenzie, T. L., & Rushall, B. S. (2974). Effects of self-recording on attendance and performance in a competitive swimming training environment. *Journal of Applied Behavior Analysis*, 7, 199-206.

McPartland, J. M., & Nettles, S. M. (1991). Using community adults as advocates or mentors for at-risk middle-school students: A two-year evaluation of Project RAISE. *American Journal of Education*, 99, 568-586.

Monsaas, J. A. (1985). Learning to be a world-class tennis player. In B. Bloom (Ed.), *Developing talent in young people* (pp. 211-269). New York: Ballantine Books.

National Executive Service Corps. (1991). The Baltimore science/math enrichment program. New York.

Nettles, S. M. (1991). Community involvement and disadvantaged students: A review. *Review of Educational Research*, 61(3), 379-406.

Peters, T. & Austin, N. (1985). *A passion for excellence: The leadership difference.* New York: Warner Books.

Promoting achievement in school through sports. (n.d.). Mill Valley, CA: American Sports Institute.

Rush, D. B., & Ayllon, T. (1984). Peer behavioral coaching: Soccer. *Journal of Sport Psychology*, 6, 325-334.

Sample, J. A. (1984). *Exploring management development roles for educational administrators: Coach, mentor, and sponsor.* Tallahassee, FL: Professional Development Specialists. (ERIC Document Reproduction Service No. ED 248 584)

Sauder, R. (1991, December). Keyed in. *Johns Hopkins Magazine*. pp. 38-45.

Sloane, K. D. (1985). Home influences on talent development. In B. Bloom (Ed.), *Developing talent in young people* (pp. 439-476). New York: Ballantine Books.

Sloane, K. D., & Sosniak, L. A. (1985). The development of accomplished sculptors. In B. Bloom (Ed.), *Developing talent in young people* (pp. 90-138). New York: Ballantine Books.

Smith, R. E., Smoll, F. L., & Hunt, E. B. (1977). Training manual for the coaching behavior assessment system (CBAS). Journal Supplement Abstract Services. *Catalog of Selected Documents in Psychology*, 1,2. (MS No. 1406).

Sosniak, L. A. (1985a). Learning to be a concert pianist. In B. Bloom (Ed.), *Developing talent in young people* (pp. 19-67). New York: Ballantine Books.

Sosniak, L. A. (1985b). Phases of learning. In B. Bloom (Ed.), *Developing talent in young people* (pp. 409-438). New York: Ballantine Books.

Swick, K. J. (1987). The school-workplace interface: Extending basic learning through an ecological approach. In B. Hatcher (Ed.), *Learning opportunities beyond the school* (pp. 33-36). Wheaton, MD: Association for Childhood Education International.

Templeton, M. (1991). The role of informal education. In the National Learning Center, *How we think and learn* (pp. 53-55). Washington, DC: National Council on Vocational Education.

Tharp, R. G., & Gallimore, R. (1976, January). What a coach can teach a teacher. *Psychology Today*, pp. 75-78.

Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. New York: Cambridge University Press.

Tharp, R. G., & Gallimore, R. (1989, Summer). Rousing schools to life. *American Educator*, pp. 20-25, pp. 46-52.